

## Technology: Optoelectronics

### OCP closes long- $\lambda$ VCSEL plant

At the end of January, Optical Communication Products Inc (OCP) of Woodland Hills, CA, USA closed its plant in Broomfield, CO, USA, which makes dilute nitride-based long-wavelength Vertical Cavity Surface Emitting Lasers (VCSELs). The facility was acquired from Cielo Communications in October 2002 for \$5m. The closure is due to the cost of Fabry-Perot lasers has been decreasing, making 1300 nm VCSEL technology less attractive as a cost-effective replacement, it said, as well as the delay in development of the next generation of optical modules.

However, OCP is retaining the Cielo intellectual property "for future development". It continues to have an 850 nm VCSEL line acquired from Gore in 2003.

OCP has reported two consecutive quarters of profits and holds \$148m in cash. For its fiscal Q4 (to end September), it reported profits of \$1.6m on revenues of \$14.8m.

[www.ocp-inc.com](http://www.ocp-inc.com)

### Firecomms opens NA, Asia offices

Firecomms Ltd of Cork, Ireland, which develops high-speed visible lasers and LEDs for small area networks, has opened regional offices in the US and Japan.

The Firecomms North America office in Houston, direct by North America business manager Lawrence Thorne, will provide sales and application support in the Americas. The Firecomms Japan office in Yokohama will be headed by Niall Keegan, general manager of Asia Pacific. Sales and field application engineers will support customers throughout Asia.

[www.firecomms.com](http://www.firecomms.com)

# Emcore grows sales by 48%; makes broadband acquisitions

Emcore of Somerset, NJ, USA exceeded its revised guidance of \$39m for fiscal Q1/2006 sales (to end December). Sales of \$39.9m were up 8% on last quarter's \$37m and up 48% on \$27m a year ago. This included: Electronic Materials and Devices, \$4.2m (up 18% sequentially and 128% year-on-year); Photovoltaics, \$10.7m (up 15% sequentially and 44% year-on-year); and Fiber Optics, \$25.0m (up 4% sequentially and 41% year-on-year).

Emcore expects March-quarter sales of \$41-\$42m, and has raised fiscal 2006 revenue guidance to \$159-\$171m.

\* In January, Emcore made its third acquisition in three months. After an initial investment in February 2005, it has bought InP-based laser designer K2 Optronics Inc, founded in 2000 in Sunnyvale, CA, USA, for \$4.8m. Last year, K2 acquired investor JDSU's cable TV (CATV) business, and claimed to be first to mass-produce external-cavity lasers in 14-pin butterfly packages (via Thailand-based contract manufacturer Fabrinet, which Emcore already uses). Emcore expects combined sales of K2's existing products and its own

direct-modulated transmitters (featuring K2's lasers) of \$7m in 2006 and \$14m in 2007 (for CATV over hybrid fibre coaxial networks and for fibre-to-the-premises). Direct-modulated lasers offer performance and cost advantages over traditional laser technology, says Hong Hou, VP and general manager of EMCORE's Ortel division. "The combination of EMCORE's optoelectronic subsystems capabilities and K2 Optronics' reliable ECL technology will provide the CATV industry with the most cost-effective, longest-reach, and most linear lasers commercially available," said K2 Optronics' CEO Raj Kapany.

After a six-month transition, K2's engineering design and prototype production teams will merge with Emcore's Silicon Valley Design Center in Santa Clara, CA. "In addition to complementing our existing 1550 nm and 1310 nm analog product offerings, and allowing us to penetrate new markets where cost and performance are key drivers, K2 Optronics' ECL technology will deliver new product possibilities for our datacom and telecoms customers," added Hou.

K2 "completes our strategic positioning regarding a vertically integrated broadband infrastructure", says Reuben F Richards, Jr., president and CEO. In December, Emcore acquired Force Inc of Christiansburg, VA, USA, which makes fibre-optic-based equipment to transport cable TV and satellite video signals via IP, HFC, FTTx and wireless networks. "As the triple play (video, voice and data) to the home and mobile devices becomes the market driver for advanced communications infrastructure, demand for video edge aggregation and fibre-ic transport in Internet protocol (IP), hybrid fiber coaxial (HFC), FTTx, and wireless networks is increasing dramatically," says Reuben.

After a six-month transition, manufacturing will be consolidated at Emcore's plants, though the engineering design team will relocate to a new design center in Christiansburg. Emcore expects Force to provide \$6m in revenue in 2006.

In November, Emcore acquired Phasebridge Inc, which supplies multi-chip system-in-package optical modules and subsystems for satellite communications and speciality markets.

[www.emcore.com](http://www.emcore.com)

## AOI adds new R&D team

Applied Optoelectronics Inc. of Sugarland, TX, USA, which makes lasers, photodetectors, and modules for fibre-optic systems, has appointed Dr Chien-Yu Kuo as senior VP to lead its new R&D team in San Jose, CA, USA. The team "significantly enhances our existing R&D activities in Texas," says president and CEO Thompson Lin.

Most recently, Kuo was founder, president and CEO of Cinta Networks, which closed in early 2002. Previously, he was

president and CEO of Pacific Fiberoptics, and held senior positions at Harmonic Inc. and AT&T Bell Labs.

\* AOI has been sampling a laser module for low-power forward-path CATV transmitter since November, and will begin volume shipments at 300 modules per month in Q2/2006. Features include a modular design, a hermetically sealed laser and photodiode, a field-replaceable thermoelectric cooler, an output power up to

8 mW, and an ambient operating temperature from -20°C to +65°C. It is pin-compatible with existing 14-pin butterfly-style laser packages, incorporates bias-T circuitry, and has a flat frequency response from 50 MHz to 1 GHz.

"Node segmentation is driving many cable TV MSOs [multiple service operators] towards lower-powered transmitters", said product manager Zulfikar Morbi.

[www.ao-inc.com](http://www.ao-inc.com)